



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/064,227

06/21/2002

Kenneth R. Wilkes

6022P001

4480

8791

7590

06/03/2008

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER

DEXTER, CLARK F

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

06/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/064,227	Applicant(s) WILKES, KENNETH R.	
	Examiner Clark F. Dexter	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 20-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-13 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on November 26, 2007 has been entered. Upon careful reconsideration, the indicated allowability of the claims is withdrawn in view of the newly discovered reference(s) to Treat et al., pn 5,286,317. Rejections based on the newly cited reference(s) follow. Any inconvenience caused by this action is regretted. Because applicant's amendments did not necessitate the new grounds of rejection, this Office action is non-final.

Claim Objections

2. Claims 1-7 and 20-25 are objected to because of the following informalities:

In claim 1, line 12, punctuation is missing after "comprising", and it seems that a colon --:-- should be inserted thereafter.

In claim 20, line 3, punctuation is missing after "a cutting knife", and it seems that "cutting knife" should be indented, and that a semi-colon --;-- should be inserted thereafter.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3724

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-13 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treat et al., pn 5,286,317 in view of Schroter, pn 3,998,119.

Regarding claim 8 and the claims dependent therefrom, Treat discloses a controller of a web cutter with almost every structural limitation of the claimed invention including:

a synchronization circuit (e.g., 41, 42, 43) that receives a synchronization signal from a web transport system (e.g., 14, 15, 30, 31, 33) that operates cyclically to advance a web, the synchronization signal providing a known point in each cutting cycle;

an actuating circuit (e.g., see col. 4, lines 18-23) that provides an actuating signal to a drive system (e.g., 24) to cause the drive system to actuate a cutting knife (e.g., 20, 21, 22) from a resting position to an active position and back to the resting position;

a position sensing circuit (e.g., 44, 72) that receives a position signal from a sensor (e.g., the optical encoder described at the bottom of col. 3) when the cutting knife is at a predetermined position that is substantially different than the resting position; and

an adjusting circuit (e.g., 40) coupled to the synchronization circuit, the position sensing circuit, and the actuating circuit, the adjusting circuit causing the actuating circuit to provide subsequent actuating signals so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal;

[claim 9] wherein the adjusting circuit provides a delay time between the receiving of the synchronization signal and the providing of the actuating signal, and adjusts the delay time to provide subsequent actuating signals so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal;

[claim 10] wherein the synchronization signal allows the phase within the cutting cycle to be determined;

[claim 11 (from 10)] wherein the adjusting circuit provides a target value for the synchronization signal and causes the actuating signal to be provided when the synchronization signal equals the target value, and adjusts the target value to provide subsequent actuating signals so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal;

[claim 12 (from 11)] wherein the adjusting circuit compares the synchronization signal to a goal value when the position signal is received to adjust the target value accordingly;

[claim 13] wherein the predetermined position is substantially at a position where the cutting knife is in contact with the web prior to cutting the web.

Treat et al. discloses an actuated cutting knife but lacks a cutting knife that oscillates. However, such oscillating knives are old and well known in the art and provide various well known benefits including among other things improved accuracy of registration of cuts. Schroter discloses one example of such an oscillating knife.

Art Unit: 3724

Therefore, it would have been obvious to one having ordinary skill in the art to replace the cutter of Treat et al. with an oscillating cutter to gain the well known benefits including those described above as well as those taught by Schroter.

Regarding claim 20 and the claims dependent therefrom, Treat discloses a controller of a web cutter with almost every structural limitation of the claimed invention including:

- a cutting knife (e.g., 20, 21, 22);

- means (e.g., 30, 31) for advancing a web of material past the cutting knife;

- means (e.g., 41, 42, 43) for receiving a synchronization signal to provide a known point in each advancing of the web;

- means (e.g., as described in col. 4, lines 18-23) for providing an actuating signal to cause a drive system to actuate the cutting knife from a resting position to an active position and back to the resting position;

- means (e.g., the optical encoders as described at the bottom of col. 3) for sensing a position of the cutting knife;

- means (e.g., 44) for receiving a position signal from the position sensing means when the cutting knife is at a predetermined position that is substantially different than the resting position; and

- means (e.g., 40) for adjusting subsequent actuating signals so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal, the adjusting of subsequent actuating signals being responsive to the position signal;

[claim 21] wherein the means for adjusting subsequent actuating signals further adjusts a delay time between the receiving of the synchronization signal and the providing of the actuating signal;

[claim 22] wherein the synchronization signal allows the phase within the cutting cycle to be determined;

[claim 23 (from 22)] wherein the means for adjusting subsequent actuating signals further compares the synchronization signal and a target value, wherein the means for providing an actuating signal operates when the synchronization signal is equal to the target value, and the means for adjusting subsequent actuating signals is further for adjusting the target value;

[claim 24 (from 23)] wherein the means for adjusting subsequent actuating signals further compares the synchronization signal to a goal value when the position signal is received to adjust the target value accordingly;

[claim 25 (from 24)] wherein the predetermined position is substantially at a position where the cutting knife is in contact with the web prior to cutting the web.

Treat et al. discloses an actuated cutting knife but lacks a cutting knife that oscillates. However, such oscillating knives are old and well known in the art and provide various well known benefits including among other things improved accuracy of registration of cuts. Schroter discloses one example of such an oscillating knife. Therefore, it would have been obvious to one having ordinary skill in the art to replace

the cutter of Treat et al. with an oscillating cutter to gain the well known benefits including those described above as well as those taught by Schroter.

Allowable Subject Matter

5. Claims 1-7 are allowable over the prior art of record.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/
Primary Examiner, Art Unit 3724**

cfd
May 30, 2008